

**NATIONAL SCIENCE FOUNDATION
DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES**

**UNDERGRADUATE COURSE AND CURRICULUM DEVELOPMENT PROGRAM
FY 1995 AWARDS**

STATE NAME					
Institution	Project Director	Discipline	Amount	Months	Award #
City	Zip Code	Department			
<i>Award Title</i>					

ALABAMA

University of South Alabama	D L Feinstein	Computer Science	\$89,976	12	9455522
Mobile	36688	Department of Computer & Information Sciences			
<i>A Cognitive-Based Approach to Introductory Computer Science Courses</i>					

ARIZONA

Arizona State University Tempe	F Hubele	Engineering Industry. & Management Systems Engineering	\$100,600	24	9455393
	85287				
<i>New Engineering Statistics Course with a Virtual Computer Laboratory</i>					
Mesa Comm. College Tempe	W B Kincaid	Biology Department of Life Science	\$83,177	42	9254228
	85281-6941				
<i>Computer Applications to Enhance Inquiry-Oriented Laboratory Instruction in Biology at a Two-Year College</i>					
University of Arizona Tucson	L J Graumlich	Interdisciplinary Institute for the Study of Planet Earth	\$100,001	24	9455714
	85721				
<i>General Education Course Development for Earth System Science and Global Change</i>					
University of Arizona Tucson	D Hughes-Hallett	Mathematics Initiative Department of Mathematics	\$46,923	24	9455970
	85721				
<i>Mathematical Sciences and Their Applications Throughout the Curriculum--Project Synergy: A Consortium Linking Engineering, Basic Science, and Social Science with Math</i>					

ARKANSAS

University of Arkansas Fayetteville	B Stewart	Physics Department of Physics	\$57,900	12	9455732
	72701				
<i>Implementing Interactive Laboratory-Based Learning Techniques in Second-Semester Introductory Physics</i>					

CALIFORNIA

California Inst of Tech Pasadena	N S Lewis 91125-0001	Chemistry Department of Chemistry	\$100,000	24	9354453
<i>Development of Computer Graphic Visualization Aids for the Undergraduate Chemistry Curriculum</i>					
Cal State U Los Angeles Los Angeles	R A Desharnais 90032-4221	Interdisciplinary Department of Biology	\$200,000	36	9455428
<i>Integrating the Electronic Desktop into the Natural Science Curriculum</i>					
Film Arts Foundation San Francisco	R Carranza 94103-3809	Engineering Department of Biology	\$50,000	24	9455761
<i>Silicon Run I.2 - An Educational Film about Integrated Circuits</i>					
Occidental College Los Angeles	L A Fathe 90041-3384	Interdisciplinary Department of Physics	\$105,292	24	9455564
<i>Unified Introductory Calculus and Physics</i>					
San Francisco State U San Francisco	J R Keeffe 94132-1722	Chemistry Department of Chemistry	\$42,758	30	9354596
<i>Molecular Modeling for the Introductory Organic Chemistry Courses</i>					
San Jose City College San Jose	M M Bunge 95128-2723	Physics Department of Physical Science	\$157,690	24	9455585
<i>Interactive, Conceptually Based Multimedia Instruction for Introductory Mechanics</i>					
San Jose State U San Jose	E D Green 95106-0760	Engineering (LLD) Department of Electrical Engineering	\$224,000	24	9551520
<i>Development of an Interdisciplinary Curriculum in Electronic Materials and Devices: Cooking Without Recipes</i>					
San Jose State U San Jose	T Hsu 95106-0760	Engineering Department of Mechanical Engineering	\$250,000	12	9455395
<i>Undergraduate Curriculum Development on Mechatronic Systems Engineering</i>					
San Jose State U San Jose	S P Perone 95106-0760	Chemistry Department of Chemistry	\$135,214	36	9455416
<i>Transforming Traditional Quantitative Analysis into a Course in Modern Analytical Science</i>					
Santa Clara University Santa Clara	S L Wood 95053	Engineering Department of Electrical Engineering	\$19,575	54	9156103
<i>Interactive Tutorial for Engineering Mathematics with Applications in Electrical and Computer Engineering</i>					
Sonoma State University Rohnert Park	S Schickele 94928-3613	Social Sciences Department of Business and Economics	\$168,703	24	9455320
<i>Networked Financial Simulation Using Lambda MOO Technology</i>					
U of Cal Berkeley Berkeley	C B Moore 94720	Chemistry Initiative Department of Chemistry	\$755,000	12	9455924
<i>Sweeping Change in Manageable Units: A Modular Approach for Chemistry Curriculum Reform</i>					

U of Cal Berkeley Berkeley	A M Stacy 94720	Chemistry Department of Chemistry	\$190,000	24	9455418
<i>Biologically-Relevant Chemistry in the Freshman Laboratory</i>					
U of Cal Davis Davis	W H Potter 95616-8671	Physics Department of Physics	\$98,796	24	9354528
<i>Reform of the "Non-Calculus" Introductory Physics Course from a Constructivist Perspective</i>					
U of Cal Los Angeles Los Angeles	O L Chapman 90024-1301	Interdisciplinary Department of Chemistry & Biology	\$149,999	24	9455570
<i>The UCLA Science Challenge</i>					
U of Cal Los Angeles Los Angeles	S W Strand 90024-1301	Biology Department of Life Sciences	\$415,601	36	9455447
<i>Computer-Integrated Introductory Biology Lab</i>					
U of Cal Santa Barbara Santa Barbara	M L Carlos 93106	Social Sciences Department of Anthropology	\$200,000	24	9455699
<i>A Multidimensional Computer-Assisted Course for Teaching the Fundamentals of Ethnographic Field Research Methods in a Laboratory Environment to Undergraduates in Anthropology</i>					
U of Cal Santa Barbara Santa Barbara	W A Prothero 93106	Geological Sciences Department of Geological Sciences	\$85,078	24	9455758
<i>Multi-Media For a "Hands-On" Oceanography Course</i>					

COLORADO

Bio. Sci. Curric Study Colorado Springs	R W Bybee 80903	Biology Department of Biological Sciences	\$650,000	44	9455725
<i>A New Model for Introductory Biology at Two-Year and Community Colleges</i>					
National Technical U Fort Collins	L V Baldwin 80521-2807	Engineering Office of the President	\$117,000	12	9550462
<i>1995 National Engineering Faculty Forum: An Interactive Teleconference Series to Share Best Practices in Undergraduate Engineering Education</i>					
U of Colorado Boulder Boulder	A J Bedard 80309-0019	Engineering Department of Engineering Administration	\$95,796	24	9455705
<i>Hands-On Engineering Homework: A New Approach to Out-of-Class Learning</i>					
U of Colorado Denver Denver	R P Tagg 80217-3364	Physics (LLD) Department of Physics	\$94,547	24	9552121
<i>Course Modules in Apparatus Design and Experimental Techniques</i>					
U of Colorado Denver Denver	K Walker 80217-3364	Engineering College of Engineering & Applied Science	\$64,210	12	9455422
<i>Engineering, Technology and Culture: With an Emphasis on Race, Gender and the Individual</i>					

CONNECTICUT

Wesleyan University Middletown	J T Rouse 06459	Science and Humanities	\$95,000	36	EW-20349
<i>Developing an Undergraduate Major in Humanistic Studies of Science</i>					
Yale University New Haven	B B Mandelbrot 06520	Mathematics Department of Mathematics	\$203,562	24	9455636
<i>Development of a Course Sequence in Fractal Geometry for Interdisciplinary Undergraduate Education and Increased Mathematics and Science Literacy</i>					

DISTRICT OF COLUMBIA

Amer Soc for Eng Ed Washington	F L Huband 20036-1207	Engineering	\$49,808	36	9452911
<i>Dissemination of Results From NSF-Supported Engineering Education Projects</i>					
Assoc of Amer Geographers Washington	S E Hanson 20036	Social Sciences Department of Geography	\$306,144	36	9455632
<i>Developing Active Learning Modules on the Human Dimensions of Global Change</i>					
George Washington U Washington	C Martin 20037-2353	Computer Science Dept of Electrical Engineering and Computer Science	\$55,000	30	9354626
<i>Integrating Social Impact and Ethics into the Computer Science Curriculum</i>					

FLORIDA

Eckerd College St Petersburg	J E Reynolds 33711	Science & Humanities	\$122,000	16	EW-20313
<i>Faculty and Curriculum Development in Interdisciplinary Environmental Studies</i>					
Rollins College Winter Park	J D Child 32789-4499	Mathematics Department of Mathematics and Computer Science	\$25,000	12	9456000
<i>A Planning Seminar for Faculty Participating in the Rollins College Quantitative Learning and Teaching Program</i>					
University of Florida Gainesville	B F Carroll 32611	Engineering Department of Aero. Eng, Mech, & Engineering Science	\$120,000	24	9455346
<i>Aerospace Concepts for Elementary Education Majors</i>					
University of South Florida Tampa	H R Mushinsky 33620-9951	Interdisciplinary Department of Biology	\$100,000	24	9455413
<i>Fundamentals of Natural Science for Non-Science Students: An Integrated Approach</i>					

GEORGIA

Emory University Atlanta	K S Hagen 30322	Chemistry Department of Chemistry	\$134,989	36	9455567
<i>The Inorganic Illustrator: A 3-D Graphical Supplement for Inorganic and Bioinorganic Chemistry Courses Distributed on CD-ROM</i>					
Georgia Tech Atlanta	E W Thomas 30332	Physics School of Physics	\$80,600	12	9455470
<i>Precision Teaching of an Introductory Physics Electricity & Magnetism Course for Engineers</i>					
Georgia Tech Atlanta	C Thompson 30332	Engineering GTRI/EOEML	\$599,603	36	9453883
<i>Multimedia in Manufacturing Education</i>					
University of Georgia Athens	J M Affolter 30602	Interdisciplinary (LLD) State Botanical Garden	\$300,000	24	9552283
<i>Building Environmental Literacy Through Participation in GIS and Multimedia Assisted Field Research</i>					

IDAHO

University of Idaho Moscow	M E Gunter 83843	Interdisciplinary Department of Chemistry	\$124,797	42	9254158
<i>Integrated Science for Elementary Teachers: A Course and Practicum Approach to Restructuring Undergraduate Science Preparation for Teachers</i>					

ILLINOIS

College of Du Page Glen Ellyn	P L Sirvatka 60137	Astronomy Department of Natural Science	\$305,000	36	9551536
<i>Creating Effective Meteorology Laboratory Modules to Improve Curriculum and Enhance Student Transition into Upper Division Coursework</i>					
DePaul University Chicago	G B Kharas 60604-2218	Chemistry Department of Chemistry	\$70,000	36	9455681
<i>A New Investigative Laboratory for Organic Chemistry Involving Polymer Synthesis and Characterization</i>					
Illinois Wesleyan U Bloomington	T R Rettich 61701	Chemistry Department of Chemistry	\$140,000	36	9455718
<i>Chemistry Curriculum Innovations</i>					
Northern Illinois U De Kalb	M Krishnamurthi 60115	Engineering Department of Industrial Engineering	\$124,286	24	9455748
<i>An Innovative Course on Elements of Manufacturing Systems for Non-Engineering Students</i>					
Northwestern University Evanston	D Meyer 60208-0001	Astronomy Department of Physics & Astronomy	\$87,287	24	9354525
<i>Active Learning Environment for Large Non-Science Majors Astronomy Classes</i>					

U of Ill Urbana-Champaign Urbana	R E Stake 61801	Mathematics Center for Inst. Res. & Curriculum Evaluation	\$6,900	6	9455577
-------------------------------------	--------------------	--	---------	---	---------

Teacher Preparation Archives Second Printing

INDIANA

Indiana U Bloomington Bloomington	R R Hake 47402-1847	Physics Department of Physics	\$119,692	66	9253965
--------------------------------------	------------------------	----------------------------------	-----------	----	---------

Project SOCRATES: Improving Introductory Physics Education Through Interactive Engagement

Purdue University West Lafayette	D D Budny 47907	Engineering Department of Freshman Engineering	\$12,000	12	9552585
-------------------------------------	--------------------	---	----------	----	---------

Publishing Conference Proceedings on Mosaic

Purdue University West Lafayette	E L Dubinsky 47907	Mathematics Department of Mathematics	\$104,920	24	9450750
-------------------------------------	-----------------------	--	-----------	----	---------

Calculus, Concepts, Computers and Cooperative Learning: Assessment and Evaluation in Terms of Dissemination Goals

Purdue University West Lafayette	D P Maloney 47907	Physics Department of Physics	\$69,678	28	9455613
-------------------------------------	----------------------	----------------------------------	----------	----	---------

Physical Science: Reasoning and Conceptual Patterns

Rose-Hulman Inst of Tech Terre Haute	M J Moloney 47803	Physics Department of Physics & Applied Optics	\$100,564	12	9455442
---	----------------------	---	-----------	----	---------

Physics Resources Packets as a Pathway to Tomorrow's Education

IOWA

Clarke College Dubuque	M L Caffery 52001-3117	Chemistry Department of Chemistry	\$27,755	30	9354515
---------------------------	---------------------------	--------------------------------------	----------	----	---------

The Integration of Molecular Modeling Across the Chemistry Curriculum as a Tool for Understanding Chemical Structure and for Developing Critical Thinking Skills

Grinnell College Grinnell	E A Herman 50112-0805	Mathematics Department of Mathematics and Computer Science	\$199,914	24	9455618
------------------------------	--------------------------	---	-----------	----	---------

A Modular Interactive Text for Linear Algebra

Iowa State University Ames	T J Greenbowe 50011	Chemistry Department of Chemistry	\$260,621	36	9455646
-------------------------------	------------------------	--------------------------------------	-----------	----	---------

Introduction of Modern Instrumentation in the First Two Years of Chemistry: The Iowa Chemistry Curriculum Network (IACCN)

University of Iowa Iowa City	R L Mutel 52242	Astronomy Department of Physics and Astronomy	\$81,660	24	9455621
---------------------------------	--------------------	--	----------	----	---------

Imaging the Universe: A New Curriculum for Undergraduate Astronomy Laboratories

University of Northern Iowa Cedar Falls	J P East 50613-4800	Computer Science Department of Computer Science	\$69,812	12	9455736
--	------------------------	--	----------	----	---------

Pattern-Based Programming Instruction

KENTUCKY

Appalachian College Assoc Berea	A W Brown 40403	Computer Science	\$19,166	7	9554456
<i>Technology in Teaching and Research: A Look at Private Education in Appalachia</i>					
University of Kentucky Lexington	R C Edwards 40506-0027	Science & Humanities College of Arts and Sciences	\$143,000	24	EW-20320
<i>The Modern Studies Curriculum: Science, Culture, Society</i>					
University of Louisville Louisville	K M Walsh 40292	Engineering (LLD) Department of Electrical Engineering	\$217,273	36	9551869
<i>An Advanced Undergraduate Laboratory for Microfabrication</i>					

LOUISIANA

University of SW Louisiana Lafayette	M C Mulder 70503-2701	Computer Science Center for Advance Computer Studies	\$161,850	12	9455450
<i>Educating the Next Generation of Information Specialists, in Collaboration with Industry</i>					

MASSACHUSETTS

Bentley College Waltham	C R Hadlock 02154-4705	Interdisciplinary Department of Mathematical Sciences	\$100,000	36	9455719
<i>Modeling Applications in Environmental Management: Preparation of Text and Teaching Guide</i>					
Boston University Boston	E A Godrick 02118-2394	Biology Department of Biology	\$162,000	36	9455288
<i>Career Direction through Integrated Introductory Biology-Chemistry Laboratory and Research</i>					
Consort Math/its Applications Arlington	W Meyer 02174-4131	Mathematics Department of Mathematics & Computer Sci.	\$157,956	30	9354509
<i>Principles and Practice of Mathematics (Math 101-102)</i>					
Education Development Center Newton	W Harvey 02160	Mathematics Department of Learning, Teaching and Tech.	\$273,177	24	9450731
<i>Gateways to Advanced Mathematical Thinking: Linear Algebra and Precalculus</i>					
Five Colleges Inc. Amherst	S E Strom 01002-2324	Astronomy Department of Physics & Astronomy	\$158,260	24	9455293
<i>An Interactive Introductory Astronomy Course</i>					
Five Colleges Inc. Amherst	D Van Blerkom 01002-2324	Astronomy Department of Physics & Astronomy	\$27,337	18	9455529
<i>A Hypertext-based Study Guide for Introductory Astronomy: Defusing Misconceptions</i>					
Hampshire College Amherst	C V D'Avanzo 01002	Interdisciplinary Natural Sciences	\$26,998	24	9552886
<i>Student-active Science: Models of Innovation in College Science Teaching</i>					

Harvard University Cambridge	D Hughes-Hallett 02138-3826	Mathematics Department of Mathematics	\$381,112	30	9352905
<i>Bridge Calculus Consortium Based at Harvard</i>					
Harvard University Cambridge	E Mazur 02138-3826	Physics Department of Physics	\$43,500	42	9254027
<i>Peer Instruction: Stimulating Renewed Interest in Physics and Other Science and Engineering Courses</i>					
MIT Cambridge	R P Binzel 02139-4307	Astronomy Earth, Atmospheric and Planetary Science	\$109,270	24	9455329
<i>Planetary Exploration in the Classroom</i>					
MIT Cambridge	T F Weiss 02139-4307	Biology Department of Electrical Engineering	\$150,000	36	9455337
<i>Development of Educational Software for Cellular Biophysics</i>					
Mount Holyoke College South Hadley	G Davidoff 01075	Science & Humanities Department of Mathematics	\$169,000	34	EW-20327
<i>Mathematics Across the Curriculum</i>					
Mount Holyoke College South Hadley	S R Dunn 01075	Interdisciplinary Department of Geology	\$150,000	24	9455682
<i>The Unity of Science: A Year-Long, Exploration-Oriented Interdisciplinary Science Course</i>					
U of Massachusetts Amherst Amherst	C D Condit 01003	Geological Sciences Department of Geology and Geography	\$70,000	24	9455563
<i>Development of a SuperCard Interface for Dynamic Digital Maps in Geology Instruction</i>					
U of Massachusetts Amherst Amherst	W J Gerace 01003	Astronomy Physics and Astronomy	\$402,860	24	9453881
<i>TTECCS: Transforming Technical Education with a Classroom Communication System</i>					
U of Massachusetts Amherst Amherst	S Das Sarma 01003	Biology (LLD) Department of Microbiology	\$273,459	36	9551531
<i>Intelligent Tutor for Concepts in Molecular Genetics</i>					

MICHIGAN

Calvin College Grand Rapids	E D Fife 49546	Mathematics Department of Mathematics	\$100,000	36	9550943
<i>The Mathematics Archives Outreach Program: A Program of Dissemination and Education about Mathematics on the Internet</i>					
Hope College Holland	J Andersen 49423	Mathematics Department of Mathematics	\$54,871	30	9354741
<i>Progressive Precalculus Problem Sets for High School and College</i>					
Oakland University Rochester	J W Russell 48309-4401	Chemistry Department of Chemistry	\$91,593	12	9455747
<i>Building Conceptual Frameworks with Synchronized Multiple Visualizations</i>					

University of Michigan Ann Arbor	A Uribe-Ahumada 48109-1274	Mathematics (LLD) Department of Mathematics	\$100,000	24	9455672
<i>Computer Supported Cooperative Learning Environment for Multivariable Calculus</i>					
University of Michigan Ann Arbor	N K Kerner 48109-1274	Chemistry Department of Chemistry	\$135,000	24	9455695
<i>Development of Collaborative, Computer-Networked Laboratories in General Chemistry</i>					
University of Michigan Ann Arbor	D J Lewis 48109-1274	Mathematics Initiative Department of Mathematics	\$29,746	24	9456125
<i>Mathematical Sciences and their Applications Throughout the Curriculum</i>					

MINNESOTA

College of St Catherine St. Paul	M Blackburn 55105-1750	Chemistry Department of Chemistry	\$60,012	36	9455394
<i>Improving Student Instrumentation Skills with Pre- and Post-lab Computer Simulations</i>					

MISSOURI

U of Missouri Saint Louis St. Louis	S K Feigenbaum 63121-4401	Social Sciences Department of Economics	\$19,466	42	9254299
<i>Introductory Microeconomics: The Way We Live</i>					
Washington University St. Louis	M E Wyession 63130	Geological Sciences Department of Earth & Planetary Sciences	\$138,133	36	9455417
<i>Educational Earthquake Visualization</i>					

MONTANA

Montana State University Bozeman	J R Amend 59717	Chemistry Initiative Department of Chemistry	\$49,248	12	9455826
<i>Planning Grant for Development of Systemic Undergraduate Chemistry Curriculum</i>					
Montana State University Bozeman	R J Ross 59717	Computer Science Department of Computer Science	\$93,344	12	9455588
<i>An Interactive Laboratory Infrastructure for Computer Science</i>					

NEBRASKA

U of Nebraska Lincoln Lincoln	J P Markwell 68588-0430	Biology (LLD) Department of Biochemistry	\$48,208	36	9550791
<i>Laboratory Exercises in Plant Biochemistry</i>					

NEW HAMPSHIRE

Dartmouth College Hanover	R D Masters 03755	Science & Humanities Department of Government	\$207,200	16	EW-20310
<i>Human Nature: Integrating Nature and Nurture</i>					
Dartmouth College Hanover	J L Snell 03755	Mathematics Department of Mathematics	\$109,945	30	9354592
<i>Change: Current Studies of Current Chance Issues, Phase II</i>					
Dartmouth College Hanover	D W Wallace 03755	Mathematics Initiative Department of Mathematics	\$1,300,000	24	9552462
<i>Mathematics Across the Curriculum</i>					

NEW JERSEY

NJIT Newark	F A Dolan 07102-1824	Engineering Department of Rehabilitation Engineering	\$169,585	12	9455764
<i>Curriculum Development - Manufacturing Systems</i>					
R Stockton College of NJ Pomona	W J Cromartie 08240	Social Sciences Department of Natural Sciences	\$100,000	24	9455331
<i>Integrating Geographic Information Systems Into Undergraduate Environmental Science Curriculum</i>					
Rutgers U New Brunswick New Brunswick	V Santarelli 08903	Physics Department of Physics	\$447,189	36	9455282
<i>Innovative Introductory Physics Laboratory Course</i>					

NEW MEXICO

New Mexico State U Las Cruces	R C Laubenbacher 88003-3699	Mathematics Department of Mathematical Sciences	\$21,570	30	9354330
<i>Teaching with Original Sources in Mathematics</i>					
New Mexico State U Las Cruces	B J McNamara 88003-3699	Astronomy Department of Astronomy	\$47,884	42	9253979
<i>Astronomy and Writing: An Innovative Approach to Science Instruction</i>					

NEW YORK

Columbia University New York	E Galanter 10027	Social Sciences Department of Psychology	\$150,000	12	9455379
<i>The Quantitative and Experimental Study of Human Nature</i>					
Columbia University New York	J D Hays 10027	Interdisciplinary Lamont-Doherty Earth Observatory	\$150,000	24	9455688
<i>A New Approach to Earth and Environmental Science Undergraduate Instruction</i>					

Cornell University Ithaca	P A Karplus 14853-2801	Biology Department of Biochemistry, Molecular & Cell Biology	\$100,000	36	9455324
<i>Computer Graphics in Introductory Biochemistry</i>					
Cornell University Ithaca	J Meinwald 14853-2801	Chemistry Department of Chemistry	\$75,000	24	9354452
<i>The Language of Chemistry: Introductory Chemistry Based on the Study of Problems at the Interface Between Chemistry and Biology</i>					
CUNY Borough Manhattan Community College New York	P R Wilkinson 10007-1079	Interdisciplinary Department of Mathematics	\$294,797	36	9455559
<i>Portfolios to Integrate Mathematics, Science and Computer Science</i>					
CUNY Borough Manhattan Community College New York	J Lang 10007	Science & Humanities Social Science Department	\$120,000	24	EW-20307
<i>BMCC Project in Science, Technology and Society</i>					
CUNY Brooklyn College New York	M I Sobel 11210	Interdisciplinary Department of Physics	\$226,589	36	9455430
<i>Taking Ownership: Science as Constructive Inquiry (SCI) - An Interdisciplinary, Urban, Multicultural Curriculum Development Program</i>					
CUNY City College New York	D K Gosser 10031	Chemistry Initiative Department of Chemistry	\$425,000	12	9455920
<i>A Workshop Chemistry Curriculum</i>					
CUNY Queens College Flushing	J Waxman 11367-1575	Computer Science Department of Computer Science	\$85,835	12	9455635
<i>A Second Course in Computing for Non-Majors</i>					
Rensselaer Polytechnic Inst Troy	W E Boyce 12108-3522	Mathematics Initiative Department of Mathematical Sciences	\$1,210,000	24	9552465
<i>Mathematics and Its Applications in Engineering and Science: Building the Links</i>					
SUNY Buffalo Buffalo	D S Hodge 14260	Geological Sciences Department of Geology	\$75,000	24	9455300
<i>New Geology Laboratories: Interactive Data Acquisition, Analysis, and Multimedia Modules of Geologic Phenomena, Part II</i>					
SUNY Dutchess Comm. Coll. Poughkeepsie	J Tavel 12601	Interdisciplinary Math, Physical & Computer Sciences	\$25,145	36	9254184
<i>Basics for Technicians: An Integrated Course of Study Encompassing Mathematics, Chemistry, and Physics</i>					
SUNY Oswego Oswego	P A Shuart 13126	Mathematics Office of Learning Support Services	\$184,393	24	9455638
<i>State University of New York (SUNY) Pre-Precalculus Program: Empowering Underprepared Two- and Four-Year College Mathematics Students</i>					
SUNY Stony Brook Stony Brook	R K Larson 11794-0001	Interdisciplinary Department of Linguistics	\$15,025	6	9150417
<i>Linguistic Semantics as Science</i>					

NORTH CAROLINA

Duke University Durham	A W Biermann 27703-2570	Computer Science Department of Computer Science	\$100,000	12	9455507
<i>"This-Is-How-A-Computer-Works": A Software System for Lecture Demonstrations, Laboratory Exercises, and Home Study</i>					
North Carolina State U Raleigh	D F Ollis 27650-5067	Engineering (LLD) Department of Chemical Engineering	\$200,000	24	9550927
<i>Freshman Laboratory for Product and Process Engineering</i>					
Sigma XI Science Research Soc Research Triangle Park	R D Bereman 27709	Interdisciplinary Sigma Xi	\$153,411	30	9354599
<i>Visualization Technologies in Environmental Curricula (VTEC)</i>					
UNC Chapel Hill Chapel Hill	J E White 27514	Mathematics (LLD) Department of Education	\$249,998	24	9551273
<i>Library for Interactive Studies in Mathematics</i>					

NORTH DAKOTA

University of North Dakota Grand Forks	T C Owens 58202	Engineering School of Engineering and Mines	\$319,940	36	9455466
<i>Enhanced Curriculum for Undergraduate Engineering Adult Learners in Industry</i>					

OHIO

Ohio State University Columbus	G Rizzoni 43210-1016	Interdisciplinary Department of Mechanical Engineering	\$10,000	24	9354403
<i>Design of Electro-Mechanical (Mechatronic) Systems - An Integrated Inter-Departmental Curriculum</i>					

OKLAHOMA

Oklahoma State University Stillwater	B D Evans 74078	Mathematics Department of Mathematics	\$204,386	40	9455305
<i>Mathematics Without Calculus</i>					
University of Oklahoma Norman	S R Ryan 73069-8813	Physics Department of Physics and Astronomy	\$34,215	24	9455740
<i>Production of Short, Animated Audio/Visual Instructional Aids for Physics Which Illustrate the Application of Physics to Technology</i>					

OREGON

Oregon State University Corvallis	D Lawrence 97331-5503	Interdisciplinary Department of Geosciences	\$100,000	24	9455665
<i>Multimedia Computer-Assisted Instruction in the Geosciences for Undergraduate Education</i>					
Portland State University Portland	W G Becker 97207-0751	Interdisciplinary Department of Science Education	\$121,511	24	9455726
<i>Pacific Northwest Environmental Studies Program: A Collaborative Interdisciplinary Curriculum Development Project</i>					
Portland State University Portland	M J Flower 97207	Science & Humanities Interdisciplinary Science Studies	\$176,000	24	EW-20331
<i>A General University Science-Humanities Curriculum</i>					
University of Portland Portland	M M Wilson 97203-5743	Biology Department of Biology	\$51,293	15	9455601
<i>Coupling Mathematics and Life Science Courses</i>					

PENNSYLVANIA

Bucknell University Lewisburg	J J Mead 17837	Computer Science Department of Computer Science	\$58,283	19	9455489
<i>An Assertion-Based Programming Methodology for Introductory Programming Courses</i>					
Carnegie Mellon University Pittsburgh	C I Davidson 15213-3815	Engineering Department of Civil & Environmental Engineering	\$188,860	24	9455399
<i>Enhancing the Environmental Content of Undergraduate Engineering Curricula</i>					
Dickinson College Carlisle	P W Laws 17013	Physics Department of Physics & Astronomy	\$725,000	36	9455561
<i>Activity Based Physics: Curricula, Computer Tools, and Apparatus for Introductory Physics Courses</i>					
Dickinson College Carlisle	K L Laws 17013	Physics Department of Physics and Astronomy	\$52,248	24	9455656
<i>Project-Centered Physics Curriculum</i>					
Drexel University Philadelphia	S J Hartley 19104	Computer Science Department of Mathematics & Computer Science	\$19,428	12	9455307
<i>A Hypermedia Lab Manual for Operating Systems</i>					
Drexel University Philadelphia	W E Magee 19104	Biology Department of Bioscience & Biotechnology	\$48,794	6	9253994
<i>An Enhanced Bioscience Education Program for the Introductory Years of the Biology Major and for Interested Preteachers</i>					
Franklin & Marshall College Lancaster	P A Leber 17604-3003	Chemistry Department of Chemistry	\$25,596	12	9455693
<i>Theme-Based Bidisciplinary Chemistry Laboratory Modules</i>					

Gettysburg College Gettysburg <i>Project CLEA: Contemporary Laboratory Experiences in Astronomy</i>	L A Marschall 17325	Astronomy Department of Physics	\$177,120	30	9354514
Haverford College Haverford <i>Mathematics Concentrations in Economics and Chemistry</i>	L M Butler 19041	Mathematics Department of Mathematics	\$25,000	18	9455972
Lehigh University Bethlehem <i>Chem PRIME: A Curriculum of Chemical Principles Through Integrated Multiple Exemplars</i>	K J Schray 18015-3005	Chemistry Initiative Department of Chemistry	\$50,000	12	9455822
PA State U University Park University Park <i>Development of Materials Synthesis Courses and Their Innovative National Dissemination</i>	R Roy 16802-1503	Engineering Intercollege Materials Research Lab	\$45,000	24	9354440
University of Pennsylvania Philadelphia <i>Middle Atlantic Consortium for Mathematics and Its Applications Across the Curriculum</i>	D M De Turck 19104	Mathematics Initiative Department of Mathematics	\$1,197,387	24	9552464
University of Pennsylvania Philadelphia <i>Development of a CD-ROM Based Multimedia Teaching Package for Introductory Materials Science and Engineering</i>	C J McMahon 19104	Engineering Department of Materials Science	\$100,000	12	9455333

RHODE ISLAND

Brown University Providence <i>Project on the Language-Art Interface: Vision and Voice - Rethinking Human Communication</i>	E Bakewell 02912	Social Sciences Department of Anthropology	\$123,680	12	9455587
---	---------------------	---	-----------	----	---------

SOUTH CAROLINA

Clemson University Clemson <i>Cooperative Organic Laboratories</i>	M M Cooper 29634-5702	Chemistry Department of Chemistry	\$159,948	36	9455526
U of SC Columbia Columbia <i>A Capstone Course in Statistics</i>	J D Spurrier 29208	Mathematics Department of Statistics	\$29,960	24	9455292

TENNESSEE

Amer Math Assoc Two Year Colleges Memphis <i>Curriculum and Pedagogy Reform at Two-Year Colleges: Moving Beyond Myths to Standards</i>	M E Mays 38134	Mathematics Department of Mathematics and Computer Science	\$34,320	36	9255850
---	-------------------	---	----------	----	---------

TEXAS

Amarillo College Amarillo	K C Wetzel 79178-0001	Mathematics Department of Mathematics	\$75,394	24	9455606
<i>Mathematical Interactive Network Design (MIND): A Computer Lab for Developmental Mathematics</i>					
Baylor University Waco	B A Pierce 76798-7088	Interdisciplinary Department of Biology	\$101,620	24	9455440
<i>Development of an Integrated, Multidisciplinary Science Literacy Course for Comprehensive Universities</i>					
Central Texas College Killeen	P J Ray 76540-9990	Interdisciplinary Department of Science	\$132,905	24	9455599
<i>Discovery - Based CAI Fundamentals of Science Course Focused on Relationship Thinking, History of Science, and Math Applications</i>					
Southwest Texas State U San Marcos	M Busby 78666	Science & Humanities	\$153,698	12	EW-20339
<i>Integrating Curricula Through Southwestern Studies: A Faculty Institute</i>					
Southwestern University Georgetown	D A Naumann 78626	Computer Science Department of Mathematics and Computer Science	\$23,698	18	9455660
<i>Program Derivation for a Data Structures Course</i>					
Texas Tech University Lubbock	D J Bagert 79409-4609	Computer Science Department of Computer Science	\$56,999	12	9455614
<i>Using Iconic Environments to Teach Procedural and Object-Oriented Programming Concepts</i>					
University of Texas Austin Austin	J Kappelman 78712-9998	Social Sciences Department of Anthropology	\$73,720	24	9354427
<i>A Laboratory Curriculum for Physical Anthropology on CD ROM</i>					
University of Texas Austin Austin	P S Schmidt 78712-9998	Engineering Department of Mechanical Engineering	\$10,000	42	9254005
<i>Video Resources for Instruction in Introductory Engineering Thermodynamics</i>					

UTAH

University of Utah Salt Lake City	J L Zachary 84112-1201	Computer Science Department of Computer Science	\$87,125	12	9455478
<i>Computer-based Laboratories for Introductory Computing Courses for Science and Engineering Majors</i>					

VIRGINIA

Radford University Radford	P A Sandberg 24142	Geological Sciences Department of Arts & Sciences	\$247,110	36	9455542
<i>Computer-Aided Learning Modules for General-Education Geology Courses</i>					

University of Virginia Charlottesville	W A Wulf 22906-9003	Computer Science Department of Computer Science	\$64,548	12	9156112
<i>Development of a Set of "Closed Laboratories" for an Undergraduate Computer Science Curriculum</i>					
VA Polytechnic Inst & State U Blacksburg	P N Palettas 24061	Mathematics Department of Statistics	\$57,866	12	9455578
<i>Revitalizing Introductory Statistics for Engineering by Capitalizing on Interdisciplinary Cooperation and State-of-the-Art Technology</i>					
VA Polytechnic Inst & State U Blacksburg	C A Shaffer 24061	Computer Science Department of Computer Science	\$19,768	12	9455403
<i>The GeoSim Interface Library for Introductory Programming Courses</i>					
VA Polytechnic Inst & State U Blacksburg	B M Tissue 24061	Chemistry Department of Chemistry	\$80,000	24	9455382
<i>Development and Evaluation of Internet-Based Hypermedia Chemistry Tutorials</i>					

WASHINGTON

N Seattle Community College Seattle	E Hamilton 98103-3514	Engineering Department of Engineering	\$75,000	24	9455566
<i>Course and Curriculum Development: Integrating Pre-Engineering Curriculum</i>					
Seattle Community College S Seattle	T O Murray 98106-1401	Engineering Dean of Technical Education	\$429,680	12	9453739
<i>Washington State Manufacturing Technology Standards, Competencies and Curriculum Development</i>					
University of Puget Sound Tacoma	D C Magnus 98416	Science & Humanities Department of Philosophy	\$143,500	12	EW-20332
<i>Scientific, Ethical and Social Challenges of Contemporary Genetic Technology</i>					
University of Washington Seattle	B Grunbaum 98195	Mathematics Department of Mathematics	\$30,000	12	9300657
<i>Mathematical Sciences: Geometry of Configurations, Polygons and Polyhedra</i>					
University of Washington Seattle	L C McDermott 98195	Physics Dept. of Physics	\$754,830	36	9354501
<i>A New Model for Physics Education in Physics Departments: Improving the Teaching of Physics from Elementary through Graduate School</i>					
University of Washington Seattle	R O Watts 98195	Chemistry Initiative Department of Chemistry	\$49,929	12	9455830
<i>Curriculum for Chemistry in a Large Urban University</i>					

WEST VIRGINIA

Marshall University Huntington	D K Walker 25701-1522	Computer Science Department. of Computer Science & Software Devel.	\$59,121	18	9455314
<i>Development of Lecture Room Demonstration Experiments to Improve the Computer Literacy Course</i>					

WISCONSIN

Beloit College Beloit	J R Jungck 53511	Biology Department of Biology	\$161,719	30	9354813
<i>The BioQUEST Curriculum and Learning Tools Development Project</i>					
Beloit College Beloit	B Spencer 53511	Chemistry Initiative Department of Chemistry	\$705,000	12	9455918
<i>ChemLinks Coalition: Making Chemical Connections</i>					
Lawrence University Appleton	E Hoft-March 54912	Science & Humanities Anthropology and French	\$160,000	44	EW-20321
<i>The Gender Studies Core-Course Sequence: Examining and Integrating Disciplinary Perspectives</i>					
U of Wisconsin Madison Madison	A B Ellis 53706-1490	Chemistry Department of Chemistry	\$50,000	42	9254107
<i>Development of a Materials-Oriented General Chemistry Course</i>					
U of Wisconsin Madison Madison	J E Handelsman 53706-1490	Biology Plant Pathology	\$19,670	42	9156087
<i>Biological Literacy Through Classroom Community</i>					
U of Wisconsin Madison Madison	J W Moore 53706-1490	Chemistry Initiative Department of Chemistry	\$949,968	12	9455928
<i>Establishing New Traditions: Revitalizing the Curriculum</i>					
U of Wisconsin Madison Madison	P H Williams 53706-1490	Biology Department of Plant Pathology	\$31,236	12	9455616
<i>Conferences on Communicating and Assessing Innovative Strategies for Life Sciences Teaching to Undergraduates</i>					
U of Wisconsin River Falls River Falls	M S Bergland 54022-5013	Biology Department of Biology	\$108,464	36	9455425
<i>Interactive Multimedia Simulations of Experimental Biotechnology Laboratories for Introductory Biology Students</i>					